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ABSTRACT

This study investigates the relationship between cooperation and empathy in young children proposed by Levine and Hoffman (1975). The study replicates the Levine and Hoffman study with the following modifications: (1) the naturalistic observation includes both males and females; (2) the sampling of cooperation is based upon the presence or absence within a 10-second period of time rather than percentage of time in cooperative interaction; (3) the measurement of cooperation is derived from both the direct coding of behavior and the ratings of teachers and other observers; other forms of social behavior are observed and a measure of peer popularity obtained. The free play behavior of 32 preschool children aged 37 to 61 months (from two classrooms) was observed by four trained individuals using a 10-second sampling technique. Reliability was determined by calculating the percentage of agreement between each of the four observers and the trainer for an average of 151 intervals. Subsequently, each child was observed for 144 intervals. The cooperativeness and popularity of the children was rated by the four observers and the two classroom teachers. Results corroborate the Levine and Hoffman study, indicating a positive correlation between cooperation and empathy. In the present study, ratings by multiple observers provide an index of cooperation which may be more valid than that in the Levine and Hoffman study. (CM)

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A Reinvestigation of the Relationship Between Cooperation and Empathy in Young Children

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A Reinvestigation of the Relationship Between
Cooperation and Empathy in Young Children

Bryan states in his 1975 review of the literature on cooperative behavior that "virtually no attention has been paid to the personality characteristics which might be associated with such behavior" (p. 134). At around that point in time theorists such as Hoffman (1976), Levine and Hoffman (1975), and Ianotti (Note 1) began formulating hypotheses about the empathic motivational basis for prosocial behaviors such as helping and cooperation. No evidence has, as yet, related cooperation to empathy and at least one study by Levine and Hoffman (1975) has failed to establish a relationship between the two variables.

The relationship between empathy and prosocial behavior has been the subject of two recent theoretical treatises which provide a framework for the present research. Hoffman (1976) proposes that humans, and perhaps animals as well, are innately capable of altruistic motivation in response to others' distress. Empathy, or as he defines it, "the involuntary, at times forceful experiencing of another person's emotional state" (p. 126) appears in infants first as a personal experience of the others' affect. The infant, for example, feels another 's distress as its own and behavior serves to soothe the empathizer's distress. Gradually, as self-other differentiation develops, the child becomes aware that it is the other and not himself who is actually in pain. This is now referred to as "sympathetic" distress, which Hoffman indicates still retains an empathic component and serves as the basis of helping behavior which is now tailored to the needs of the other.

It should be noted that Hoffman's theory most centrally proposes an empathic motivational basis for altruistic prosocial behavior and not cooperation specifically. Altruism is defined by him as "action on behalf of someone else which

involves a net cost to the actor" (p. 124). Caution should be taken in implying that the same empathic motivational basis would underly both altruistic and cooperative behavior for two reasons. First of all, cooperative behavior may be costly to both children who are so engaged but does not likely involve a "net cost" to either child. It is more probable that cooperation requires both mutual sacrifice (in time and effort) and mutual gain. Secondly, in view of Yarrow and Waxler's (1976) recent finding of correlations between helping, sharing, and comforting behaviors ranging from -.13 to +.32 the term "prosocial" should not be taken to imply similarity or "unity" among behaviors that it represents.

Another similar, yet less well developed, theoretical model which would link cooperation to empathy is suggested in the writings of Feshbach (1975). Feshbach and Feshbach (1969) administered the Feshbach and Roe Affective Situation Test for Empathy to girls and boys 4 to 5 and 6 to 7 years of age. Teachers' ratings of aggression were also taken. While no relationship between empathy and aggression was found for girls, the correlation was found to be positive for the younger boys and negative for the older boys. Feshbach (1975) concluded that a high level of aggressive behavior reflected a high social activity level and lack of maturity rather than hostility in the younger boys while in the older boys it suggested a diminished ability to vicariously experience the pain of those receiving the aggressive act.

The prediction of positive relationship between cooperation and empathy would, by extension of Feshbach's model, have a hedonistic flavor similar to that given above for the aggression-empathy relationship in older boys. Empathy might serve to facilitate the development of cooperative behavior since the pleasurable consequences of that behavior would also be vicariously experienced.

The present study attempts to replicate the Levine and Hoffman (1975) study with the following modifications: the naturalistic observation includes both males and females; the sampling of cooperation is based upon the presence or absence within a 10 sec. period of time rather than percentage of time in cooperative interaction; the measurement of cooperation is derived from both the direct coding of behavior and the ratings of teachers and other observers; other forms of social behavior are observed and a measure of peer popularity is obtained.

Thirty-two preschool children, 11 girls and 21 boys, from two classrooms participated in the study. They ranged in age from 37 to 61 months (mean = 47.5). The "free play" behavior of the children was observed by 4 trained individuals using a 10-second time sampling technique. This paper will refer to the ratings of cooperation and the coding of cooperation behaviors classified on the basis of the definition given by Bijou, et al. (1969). Reliability was determined initially by calculating the percentage of agreement between each of the 4 observers and a third person (the trainer) for an average of 151 intervals. Following this period each child was observed for a total of 144 intervals each. The average percentage of agreement between the codings of the trainer and the 4 observers was 90%. All observers worked throughout the study in pairs, and the agreement for pair 1 was 89% and for pair 2 was 78%. Near the end of the study the 4 observers and the 2 classroom teachers rated the cooperativeness and popularity of the children on two 7-point scales. The scale of cooperativeness was derived from the coding system used here and the ratings of popularity were based on a rating scale created by Roff, Sells, and Golden (1972). Correlations between the observer's and teacher's ratings of cooperativeness ranged from .35 to .71 while for popularity the range was from .12 to .33. The measure of

empathy used was one devised by Feshbach and Roe (1968). The validity of the coding of cooperation was supported by correlations with both teacher and rater estimates on the 7-point scales.

Coded free play cooperation showed low correlation with both broad and narrow scoring of empathy as defined by Feshbach and Roe(1969) respectively $r = -.04$ and $r = -.16$. These findings corroborate the results of the Levine and Hoffman (1975) study. In addition, a positive relationship between coded cooperation and observer 1's ratings of popularity ($r = .48$, $df = 30$, $p < .01$) and low positive correlations with teacher ratings of popularity ($r = .27$, n.s.) and observer 2's ratings of popularity ($r = .25$, n.s.) would lend some support to the relationship between cooperation and popularity.

Although the coded data on cooperative behavior failed to reveal a relationship to the measurement of empathy, the ratings of cooperation by both teachers and observers showed a different picture. All rated measures of cooperation correlated positively and significantly with one or both of the Feshbach measures of empathy. The correlation between teacher rated cooperation and the narrow definition of empathy was .39 ($df = 30$, $p < .05$) while the relationship to the broad scoring of empathy was .59 ($df = 30$, $p < .01$). Cooperation as rated by observer 1 and observer 2 correlated .48 ($df = 30$, $p < .01$) and .46 ($df = 30$, $p < .01$), respectively, with empathy using the broad definition. Since both variables correlated with age, a partial correlation ruling out the effects of age was computed and there was little change in the above noted correlations.

Teacher ratings of cooperation also correlated positively and significantly with age, teacher ratings of popularity and observer ratings of cooperation and popularity. The relationship between teacher ratings of cooperation and age was

.48 ($df = 30$, $p < .01$) while they related. 70 ($df = 30$, $p < .01$) to the teacher ratings of popularity. Teacher rated cooperation related positively and significantly with observer 2's ratings of popularity ($r = .43$, $df = 30$, $p < .05$).

The corroboration of the Levine and Hoffman (1975) study and yet the findings of a relationship between empathy and cooperation using the scalar ratings by teachers and observers might be explained in at least a few ways: ratings of cooperation may have taken into account behavior in a greater number of situations as well as cooperation in situations which may have been more emotionally arousing and would require greater empathic sensitivity; empathic children may not have chosen to play in centers containing dolls and building materials likely to elicit more cooperative behavior during this period of observation. The latter explanation is not as likely when one considers that the Levine and Hoffman (1975) study included observation of each child for 150 minutes and the present study adds another 24 minutes, thus making highly likely that there were sufficient opportunities for observation of children playing within a number of play centers. Finally, it is possible that by sharply specifying and delimiting the complex behaviors considered to be cooperative that high reliability in coding was purchased at the expense of validity. Weick (1968) for example, points out the ambivalence observational researchers express regarding a premature preoccupation with reliability in the research process. Ratings by multiple observers may therefore have provided the more valid index of cooperation in the present study

Reference Notes

1. Ianotti, R.J. Empathy as a motivator of altruistic behavior. Paper presented at the meeting of the American Psychological Association, New Orleans, September, 1974.

2. Kuchenbecker, I., Feshbach, N., & Pletcher, G. The effects of age, sex and morality upon social comprehension and empathy. University of California, Los Angeles. A paper presented at the Western Psychological Association Annual Meeting, San Francisco, April, 1974.

References

Bijou, B., Peterson, R.F., Harris, R.F., Allen, K.E., & Johnston, M.S. Methodology for experimental studies of young children in natural settings. The Psychological Record, 1969, 19, 177-210.

Bryan, J.H. Children's cooperation and helping behaviors. In E.M. Hetherington (Ed.) Review of Child Development Research (Vol. 5). Chicago: The University Press, 1975.

Feshbach, Norma Deitch. Empathy in children: Some theoretical and empirical considerations. The Counseling Psychologist, 1975, 5, 2, 25-30.

Feshbach, N. & Feshbach, S. The relationship between empathy and aggression in two age groups. Developmental Psychology, 1969, 1, 102-107.

Feshbach, N.D. & Roe, K. Empathy in six and seven-year-olds. Child Development, 1968, 39, 133-145.

Hoffman, M.L. Empathy, role-taking, guilt and development of altruistic motives. In T. Lickona (Ed.) Moral Development and Behavior. New York: Holt, Rinehart and Winston, 1976, 124-143.

Levine, L.E. and Hoffman, M.L. Empathy and cooperation in 4-year-olds. Developmental Psychology, 1975, 11, 4, 533-534.

Roff, M., Sells, S.B., Golden, M.M. Social adjustment and personality development in children. Minneapolis: The University of Minnesota Press, 1972.

Weick, K.E. Systematic observational methods. In G. Lindsey & E. Aronson, (Eds.) The Handbook of Social Psychology. Mass.: Addison-Wesley, Vol. 2, 1968.

Yarrow, Marian Radke, Waxler, Carolyn Zohn, Barrett, David, Darby, Jean, King, Robert, Pickett, Marilyn, & Smith, Judith. Dimensions and correlates of prosocial behavior in young children. Child Development, 1976, 47, 118-125.